



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/227,242	01/08/1999	EDWARD S. MISZCZAK	8313	8511

7590

04/08/2003

MARK W. CROLL  
ILLINOIS TOOL WORKS  
3600 WEST LAKE AVENUE  
GLENVIEW, IL 60025

EXAMINER

ELVE, MARIA ALEXANDRA

ART UNIT

PAPER NUMBER

1725

DATE MAILED: 04/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/227,242

Applicant(s)  
Miszczak et al.

Examiner  
M. Alexandra Elve

Art Unit  
1725



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 3/30/03
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 & 3-27 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-22 & 25 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5, 8-13, 15-16, 23-24, 26, 27 is/are rejected.
- 7) ☒ Claim(s) 4, 6-7, 14, 17-20 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1) ☐ Certified copies of the priority documents have been received.  
2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6) ☐ Other

Art Unit: 1725

### DETAILED ACTION

#### *Claim Rejections - 35 USC § 112*

1. Claims 9-10, 12-13, 16, 23-24 & 26-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Combinations of Fe-Mn Fe-Si, Fe-Ti and Fe-Mn-Si are in the claims, however it is not known what is meant by combinations. Correction is required.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 5, 8-11, 12-13 & 15-16 are rejected under 35 U.S.C. 103(a) as obvious over Nagarajan et al. (US Pat. 5,824,992).

Nagarajan et al. discloses a metal core weld wire in which the core composition includes iron powder usually as filler material and the core composition contains between approximately 13 to 45% of the total wire weight (abstract, col. 1, lines 15-25). The steel sheath includes about

Art Unit: 1725

0.005 to 0.15% carbon, and 0.1 to 1.1% Mn (col. 4, lines 25-35). Additionally, the total wire contains 0.005 to 0.150% carbon (col. 4, lines 5-14). The metal core composition contains 0.1 to 2.5% Mn, 0.2 to 10.0% Fe, 0.2 to 2.0% Si, 0.001 to 0.100% Ti and 0.3 to 12.5% Fe-Mn, 0.4 to 12.0% Fe-Si, 0.201 to 10.1% Fe-Ti, 0.5 to 14.5% Fe-Mn-Si (col. 4, lines 20-25).

Although Nagarajan et al. does not teach reduced fume generation, it does teach the same metal core weld wire composition as instant claims. If a composition is physically the same, it must have the same properties. A chemical composition and its properties are inseparable. Therefore the prior art teaches the same chemical composition, the properties of instant claims are necessarily inherent and present. See In re Spada, 15 USPQ 2d 1655, 1658.

Nagarajan et al. discloses a carbon content as low as 0.005%, although not 0.0046 or 0.0047% and additionally, does not disclose the exact same composition as instant claims.

The exact amounts of each of the constituents as presently claimed are not disclosed in the prior art; however, the prior art compositions closely approximate or overlap applicant's claimed composition. It has been held that one of ordinary skill in the art at the time of the invention would have considered the claimed compositions to have been obvious because close approximation or overlapping ranges in a composition is considered to establish a prima facie case of obviousness. See In re Malagari, 182 USPQ 549, Titanium Metals v. Banner 227 USPQ 773, In re Nehrenberg 126 USPQ 383.

Art Unit: 1725

*Allowable Subject Matter*

4. Claims 4, 6-7, 14 & 17-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach the amounts of Mn, Si or Al as instant claims or the fume generation rate.
6. Claims 23-24 & 26-27 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
7. Claims 21-22 & 25 are allowed.
8. The following is an examiner's statement of reasons for allowance: the claims as supported by the specification differs from the prior art in that it does not teach a metal core composition carbon range from 0.0019 to 0.0047%.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 1725

***Response to Reconsideration***

9. Applicant argues that combinations of Fe-Mn Fe-Si, Fe-Ti and Fe-Mn-Si are compounds and not elements. The examiner respectfully disagrees because the stoichiometry is not stated.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Alexandra Elve whose telephone number is (703) 308-0092. The examiner can normally be reached Monday to Friday from 6:30 AM to 3:00 PM.

Any inquiry of general nature to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 308-0661.

April 6, 2003.